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ANÆSTHESIA IN LABOR.

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Read before the Obstetrical Society of Philadelphia.

I am here to-night to plead for "Anæsthesia in Labor." Not only in troublesome instrumental labor, but in all cases where the pains of travail fall upon women.

I offer the following propositions:—

1st. Anæsthetics are *not* used in a fair proportion, in the pains of labor, to their use in ordinary surgical operations.

2d. A proper anæsthesia is *as* directly indicated, and is more safe in its use, to the obstetric patient than to the surgical patient, case for case.

In addition to the arguments in support of the foregoing, I will consider the questions: 1st. What is the danger to the child. 2d. What anæsthetic should be used. 3d. What effects may be expected.

(a) Upon the general system of the mother, with cases illustrating.

(b) Upon the parts involved in parturition.

In considering the first proposition I am willing to acknowledge the terrible nature of all induced pain; having myself suffered without chloroform, I know how to appreciate it. The knife cutting into the quivering flesh involves all that is terrible, in anticipation as well as in realization, against which nature shrinks, demanding anæsthesia. So also in the presence of suffering from any character of operation, such is the terror inspired that an anæsthetic is in-

voked, often upon the most trivial occasion, from the pulling of a tooth to the capital operation.

But granting the horrible nature of induced pain, it is of but brief duration; from five minutes to two hours will measure the period of almost every case in which anæsthesia is demanded; the great majority requiring the minimum of time as well as involving the minimum of suffering.

In labor cases, on the contrary, pain continues, with intermissions which seem only to aggravate the coming pain, from two hours, as a minimum, to ten to fifty long, weary hours; a character of pain which Prof. Meigs well says has no other name but agony, and this pain accompanied with suffering which beggars description. In the midst of fasting and sickness, the body must labor; weakness and exhaustion plead in vain for rest; with every muscle of the body exercised to its utmost tension, in mortal terror for very life, as in a treadmill, it must labor. On and on, again and again, as the resistless flowing tide, comes the pain. Such is the terror of this scene that the prophet of old seizes it, there being none greater, to describe a fearful calamity. "For I heard a voice, as of a woman in travail, and the anguish of her that bringeth forth her first child; the voice of the daughter of Zion, that bewaileth herself, that spreadeth forth her hands, saying woe is me now, for my soul is wearied because of murderers."

This is a labor scene the truth of which we all know. Who among us has not heard from suffering woman the despairing cry of Saul, "Kill me, for anguish hath come upon me;" or the more familiar, "I shall die, I shall die, and not live." And yet, while our hearts have been

moved with pity and sympathy, how many of us have failed to give her the comfort of anæsthesia—this greatest gift of God, so especially adapted to her need; this power of God, which alone is able to say to this troubled sea of agony "Peace, be still." I ask, gentlemen, *is it fair*, if anæsthetics be safe in labor, that they be denied here and offered for the pulling of a tooth?

But the saddest side of this scene is yet to be considered. Upon whom does this sad visitation fall? Is it upon the stalwart man, whose heart, and nerve, and muscle and nature are strong to endure this terrible ordeal? who in long years of exposure and training has learned to labor and to suffer? I say, is it the strong and stalwart of our race who are thus called upon to suffer? Oh, no! Not so. If they must suffer, they must have gas. If a leech is to be placed they cry, "Couldn't I have a little ether?" If it were they, indeed, there were no need for this paper; public opinion, so potent in making presidents and in moving our thoughtful (?) legislators, would long ago have moved the profession to see the propriety of "Anæsthesia in labor." On the contrary, it is the weak, delicate woman; the daughter; perhaps, a young creature, whom a kind providence has shielded from sun and wind, whose delicate fingers have been taught to lift the music zephyrs from their hiding places—nothing weightier; whose sweet, peaceful life has never known a thought of pain or care. It is this gentle creature, so brave and true that she enters willingly this dread scene of suffering, counting her life not dear for those she loves. She takes the hand of her physician; she believes that she is forewarned; she believes that she is prepared to bear; but is she? Not so. Language never yet has framed the words which could tell the tale. She is prepared to meet death, if need be; but suffering more than death, she cannot die. How often have you and I heard her call for death, pray for death, as the terrible reality forced itself upon her astonished consciousness. She is told it is all natural! God has so ordained it! She can bear it! All women bear it! And so, in her pain and in her exhaustion, as a lamb upon which the dogs are set, she suffers her time. Who says this is right? What father will condemn his child to this? What husband will stand by and see this, when the fact stands patent before us that, with added safety to mother and child, by the scientific use of the means which the God of nature has placed in our hands, she may be led through this terrible ordeal as though but bathed in the waters of the "river of Lethe;" and though all these pains

must be submitted to, and all this suffering endured, the consciousness may the while be so-laced by sweet sleep, and the visions of dream-land take the place of stern reality.

And now how stands the account between the pains of labor and the induced pains of Art? But this is not all. We have but studied the scene of a natural labor. Now, let trouble come, and the aid of Art be invoked, with all the long list of procedures needful to save life. How shall the woman endure the scene? The forceps, which her imagination has pictured as a far-off horror, now looms into life; a strong man adds all the power of his might to the forces already grinding her to pieces; and the more terrible instruments which shall mutilate her child, that only source of joy which can, for a moment, cause her to forget her anguish. Consider the agony of mind and heart, and compare it with the pains, and pangs, and fears of the most terrible of operations, and how stands the account? But stop; consider; of all the people who inhabit this earth, perhaps not one in a thousand has ever known a pain requiring anæsthesia; and yet, of all creatures born, whether living or dead, whether mature or immature, I may almost say none, not one, has come forth from a living mother, but that, more or less, it was shrouded with pain which might have been relieved. Balance now the account, and will not every heart join with me in the conclusion: Let anæsthetics be administered in labor cases, and its benefit compared with its help in all other pains, and the balance in favor of pain and suffering soothed shall be, without measure, in favor of anæsthesia in labor.

In considering the second proposition we have to compare the general condition of the parturient woman with the general condition of the surgical patient, and study the effect of the anæsthetic upon each.

Contrasting these conditions we have—

1st. The surgical patient approaches the operating table in varying stages of *disease*, whereas the obstetric patient approaches her labor in varying stages of *health*. Second, the surgical patient expects to wake from his sleep with a mutilated body, perhaps with loss of members, or at least a lingering suffering. To wake, for him, is, at best, to weep. She, on the contrary, looks upon this sleep as the heaven-sent haven of rest. On the borders of this sleep she lays her burden down—she wakes to receive her reward; she seeks this sleep a suffering woman in travail—she hastens to wake a happy mother, reaping the fruits of her suffering and patience during the

long past months in the fullness of joy, such as a mother only can know. To wake, for her, is to welcome her harvest home.

2d. They come subject to the shock of sudden accident, or worn by lingering disease; the nervous system all unstrung. She in the height of highest vitality; for never is a woman's life more perfect than now; her nerves and muscles all braced for the contest for which nature, foreseeing, has been preparing; not that she is thus strong enough to fight her battle alone, but that she is the *best that she CAN BE*.

3d. If they have a tendency to anæmia of the brain, 'tis greatest now, and chloroform will but intensify the risk. If she have a tendency to anæmia of the brain, 'tis least now, her blood being rich as possible for her, and surging through her brain never so high.

4th. If they have valvular disease of the heart, requiring highest vitality of system to keep in regular action, how is this vigor lessened now, how great is the tendency of chloroform still further to increase the demand. Whereas when she comes into labor with valvular disease, instead of previous exhaustion and debility, her heart is stimulated by her condition, excited by her surrounding circumstances, by every act of preparation, by very hope. Urged to its utmost power by constantly recurring pain, by the violent muscular effort, its danger is from over action, from over exertion, lest its walls or its valves give way. How appropriately here comes in the soothing, sedative influence of the anæsthetic, quieting the excitement, subduing the pain, lulling into gentle slumber; the scene of labor is gone; the woman bides her time in happy unconsciousness; the heart resumes a normal pulsation, safe, under proper care. Even in the uræmic poisonings, with the threatened convulsion, that nightmare of the obstetric condition, let the onset be anticipated, let the nervous irritability be lost in gentle slumber, and the time for spasm may pass unheeded, the signal may never be given.

I appeal to the experience of the profession: does any one know of an instance in which a patient has passed from a state of proper anæsthesia into convulsion. For myself, I never saw it; on the contrary I have seen the threatened spasm abort and never return.

It is the habit of the profession, after the onset of convulsion, to fly to chloroform and the lancet; why should not the earlier use of the former do away with the demand for the latter.

We may deduce from the foregoing that in the ordinary surgical operation the death tendencies

are from shock, from anæmia of the brain, and from general and special debility, while we know that the death tendencies of chloroform are exactly upon these same lines. On the contrary, the death tendencies of the parturient condition are from over exertion or consequent reaction, from plethora, from congestion of the brain, from convulsion; the tendencies of, chloroform being all antagonized to these same; and as two waves meeting produce a calm, as oil upon troubled waters give peace, so is it with anæsthesia in labor. Nor is this all: while the pains, *per se*, in each case may be equally unbearable, and equally require anæsthesia, the cause and condition of the pain vary absolutely. In the surgical operation we have the flesh incised, the nerves divided; it is a concentrated, localized pain, of great intensity. To subdue the knowledge of this pain requires absolute snoring anæsthesia. On the contrary, in labor there is no sudden division of the continuity of any tissue. This is the pain of horrible cramp. It is the pain of the muscular contraction, the resistance of muscular tissue against inordinate distention. It is the torture of the rack, and such is its fearful power, that in the tearing asunder of the distended parts, as of the perineum, the very laceration brings relief, as though the gates of Paradise had opened to give the weary one rest. And yet under a very light anæsthetic effect, long before the snoring sleep announces profound anæsthesia, the muscles relax, resistance ceases, the parts distend to their utmost capacity, while the consciousness is lost in a dream. It will be remembered by all who administer anæsthetics that the test as to condition for operation is not that the muscles be perfectly relaxed, not that the eyelid may be stretched without making resistance, but that the delicate and sensitive cornea may be touched with the rough finger end without causing a sensation. Such a condition should be unknown in the obstetric chamber.

And further still, as a measure of safety in favor of the obstetric use, let it be remembered, the ordinary surgical patient, under this profound anæsthesia, is always bordering on the verge of death; he has within himself nothing but his own weakened life force to support him; sinking must be met by flagellations, by shock from the battery, by ammonia, by inverting the body that blood may gravitate to the brain; whereas in the parturient patient we have all these substitutes within the citadel, the natural forces then in fullest exercise, acting as a guard against possible accident. The constantly recurring pain serves for

the battery, the ammonia, the flagellation, while the muscular exertion, compressing the lungs, forcing the blood into the brain and holding it there with vigorous effort during the pain, answers in advance for the tilting of the body, so often tardy, in all cases where the anæsthetic is administered with only an approach to proper care.

Certain it is that any woman may be chloroformed to death, as she may be smothered to death by placing a pillow over her mouth and holding it there; but I am thoroughly convinced, and I trust I have shown some good reasons for believing, that far beyond the average of ordinary surgical cases in which they are usually administered, the necessary and proper anæsthetic effect is safe in labor cases. But the question as to the safety of anæsthesia in labor involves, beside the foregoing, the question as to its effect upon the child. If its delicate life be endangered, then falls the entire argument; but gentlemen I have no hesitation in asserting the contrary, for the following reasons:—

It stands upon record, that in one case, before instruments were applied, a woman had inhaled three pints of chloroform, and as a consequence, not only was the babe still-born, but it was so saturated with chloroform that its body was preserved in color, form and feature, during three days, in hot weather, without ice. I mention this case, gentlemen, simply to show you that a woman in the obstetric condition could scarcely be chloroformed to death. If the mother's blood may be so saturated with chloroform that after passing through the placental vessels it shall retain sufficient chloroform so to inject the tissues of the child, and yet the mother live, all argument against its safety to the mother must fall. I only mention this to condemn. I look upon such a practice simply as an experiment as to how much chloroform would be required to kill a child and save ice to its burial, expecting the mother's death as a matter of course. Pure chloroform is always dangerous; three pints at one labor must be deadly. I think the profession will bear me out in the assertion—the babe will be influenced only in a small proportion to the anæsthetic effect upon the mother.

If I may offer my own experience during the last twelve years of almost constant using in my labor cases, I will say I never saw a babe exhibit any marked influence of the anæsthetic, nor have I ever heard an intimation to the contrary by any one present at the birth, although, as a rule, I always call the attention of the friends to the condition of the babe immediately upon its birth,

for my own protection against gossiping report. If a mother be smothered to death, I am ready to admit that the babe would suffer; but such is not good practice.

Let us consider the other side: How much chloroform can a babe bear? We have numberless instances of young babies inhaling chloroform. This is acknowledged to be the anæsthetic for babes, and reaction is prompt after having been kept hours under its influence. Among others, Professor Simpson mentions a case in which a babe not one month old was kept continuously under the influence of chloroform during twenty-four hours, with no bad symptoms and absolute control of convulsions, which had resisted all other means. In 1866 I administered to a patient of mine, only ten days old, for an operation by the late Dr. F. F. Maury, without trouble, and prompt recovery. And in 1870 I administered to my own child, a babe of two days old, pure chloroform to perfect anæsthesia, unbroken for forty-eight hours, except to feed with a spoon what nourishment could be drawn from the mother's breast. My nurse sat for thirty-six hours without moving from the chair, or, I believe, her eyes from the face of the child which lay upon her lap. The trouble was a horrible convulsion, resisting all efforts to soothe and relieve. Babe was threatened with immediate death; chloroform was resorted to as a forlorn hope. During this entire period, any attempt to allow an approach to consciousness was followed by a renewed onset of convulsion. Recovery followed without an untoward symptom; and I offer, as my answer to this query, a babe in utero can bear all the influence of chloroform which a mother can impart, herself not being in unwarrantable jeopardy. And I will say further, if a mother can, to a limited extent, impart the anæsthetic effect to her child, in mercy's name, let it be so, and let the child be spared the pain which, unless anæsthetized by the hand of God, it must suffer in coming into this world.

We have now to consider what anæsthetic should be used? And in this study we shall see, from the side of supply, as we have already seen from the side of demand, how wonderfully the indications of the obstetric condition are met by the anæsthetics.

I am accustomed for a number of years past to use a combination of chloroform, ether and alcohol. The peculiarities of chloroform are: 1. It has the power to subdue pain by its effect upon the nervous system, independent of its influence upon the blood, acting as a narcotic. 2. It is by far the most prompt and powerful in its effect.

3. It is the most dangerous after a slight stimulation, often wanting, and a slight nausea, very often absent. The tendency to paralyze the nervous system at once is manifest. First the sensory, then the motor nerves, then the functions of life succumb; with it immunity from pain precedes the stertorous sleep; a tendency to induce anemia of the brain distinguishes it from ether or alcohol, as well as the fact, well established, that it may, without warning, paralyze and arrest the action of heart and lungs. With it the stage of inebriation is slight or wanting. In ether we have almost the opposite of chloroform. In its approach to anesthesia we have, first, a long stage of inebriation, with nausea and vomiting, and with excited spasmodic—I should say, drunken—efforts, often requiring strong hands to restrain; second, perfect immunity from pain, with ether, exists only in the stertorous sleep, often only after a long and tedious administration; third, the heart and lungs are stimulated, the brain and general system congested; the anæsthetic influence is induced only through the blood, and in the following stages: 1, Inebriation; 2, Stupor; 3, Muscular relaxation; 4, Stertor; and 5, Coma, if pushed too far.

In alcohol we have only two stages, intoxication and reaction—the drunkard's sleep. Now what are the indications of the obstetric condition? First, we have a sudden on-setting pain of great violence; accompanied with this pain, we have a muscular effort involving all the muscles of the body, a straining effort threatening injury to the valves of a diseased heart, or the rupture of the vessels of a delicate lung; we have this effort forcing blood into the brain and holding it there, maintaining a temporary mechanical congestion of the brain; we may, at the same time, have rigid spasms of the os uteri or perineum, cramps of the voluntary muscles or general convulsions. Now, how shall these indications be met? Without controversy, chloroform stands forth as the remedy, its very points of danger being antagonized, to a certain extent, by the obstetric conditions. Does chloroform promptly subdue pain? Here is a sudden on-setting pain! Does it induce anemia of the brain? Here is an abnormally, though mechanically congested brain. Does it relieve muscular tension and spasm, and cramp and convulsion? Here are muscular spasm and tension perfected, with the most terrible of cramps, and convulsion always possible. Does it tend to depress the action of heart and lung? Here is the action of heart and lung stimulated to highest effort by pain, by excitement, by muscular exertion by nervous irritability. But you say it is

dangerous; and I say it is dangerous. Its effects may be in excess of the demand. It may paralyze and arrest the labor. In the absence of pain we want no chloroform; how shall we obtain its benefit without its risk? Now comes ether; evaporating three times more rapidly than chloroform, it brings its first stimulating effect to antagonize the ever possible depressing or enervating effect of chloroform, without in the least retarding the anesthesia, and its own anæsthetic effect is developed after the force of the chloroform is spent. Its own stage of excitement and nausea is lost in the early anesthesia of its rival, and its dangerous sequences forestalled; thus we have, if properly combined, a perfect anæsthetic against a labor pain. But in the absence of pain we need no anæsthetic, and should allow only the lightest possible influence; indeed, a pure stimulant is to be desired. Now comes alcohol; less volatile than its fellows, if administered with them it must mainly act after they are gone. Mixing freely with them, it serves to dilute and make more manageable these powerful agents.

I am accustomed to use the following combination, the proportions graded according to the relative strength and nature of the ingredients and the demands of the case, increasing or lessening either ingredient if the peculiarities of any case seem to indicate it, which I find very rare. Combine—

R. Ether,	3 parts
Chloroform,	1 part
Alcohol,	2 parts.

and we have an anæsthetic admirably calculated to meet the obstetric condition. Of this mixture three drachms is a quantity easily handled. It may be sprinkled at one time on the inhaler, and just as the patient exclaims, "quick, quick, Doctor, here comes a pain," let the inhaler be placed near the mouth, but not against it, so as to at all exclude the air; after two or three rapid inhalations the pain may play itself; our patient is in comfort. The rapidly evaporating ether and chloroform, antagonized upon the dangerous or troublesome points, and at one as to the anesthesia, have done their work, and are away almost as soon as the pain, leaving the slower alcohol to foster the influence and to guard against injury, as a watchman to lock up after the firm has departed. This effect may be thus intermitted or made continuous, may be lightened or deepened, as indicated.

I have thus far considered anesthesia in its brute force, as demanded in ordinary operations; but there is another stage of anesthesia peculiarly adapted to labor cases, in which the lion

becomes a lamb. Writers have written about a stage of anesthesia, most desirable and safe, in which pain is absent and yet consciousness is not lost, as a condition perfectly adapted to minor operations in surgery, very difficult to obtain as well as maintain. But to most surgeons this stage is a "myth," a "will-o-the-wisp." So far as I have used anesthetics in ordinary surgery, or seen them used by other surgeons, there are but two stages of anesthesia, one of inebriation and one of profound sleep, ready for the operation; but in the anesthesia of labor cases, this rare and beautiful condition referred to not only may be, but should always be looked for. Profound anesthesia is seldom required, even to subdue the worst pains of labor, and in the absence of pain but the slightest effect is required to continue the dreamy sleep, in which the patient follows in her imagination the direction of the physician; her brain crystallizes every idea into a scene of reality, and thus, in vision clear and vivid, she visits the scenes of her childhood, and lives again the pleasures of a long ago, or sings and revels in the pleasures of to-day, all unconscious of the pain which will at regular intervals break in as a cloud, perhaps changing her tone, arresting her voice, maybe forcing a long, low moan, or a complaint, and then the face is lit again with smiles, the song finished or the journey renewed, all unconscious of the interruption, and she wakes when all is over, remembering every scene of her dream life as a vivid reality, and the pains of her labor, if at all, only as a dream.

She has fulfilled the prophecy which stands to-day, though written centuries ago: "Before she travailed she brought forth, before her pains came she was delivered of a man child."

In illustration of this beautiful effect I will select some examples, which I trust will interest you, and which with one or two exceptions are residents of this city to-day.

Mrs. F., 1871. Taken in labor two weeks premature, in consequence of alarm at the sudden death of an aunt; was so very nervous that I feared for her safety; she had settled in her mind that she would certainly die in this her second confinement. Immediately after the first few inhalations she became tranquil, no sickness, no suffering; she lay upon her bed as though simply resting; no one in the room except myself supposed she was unconscious of her pain, which regularly recurred, and was regularly responded to by the straining effort, dozing slightly in the interval of pain; she replied to every question intelligibly, and appeared in perfect comfort.

Labor completed itself naturally; anesthesia was continued slightly until the close of the third stage, on account of her nervousness, and contrary to my custom; after bandaging, I said aloud: Mrs. F., your babe is born; she replied, in perfect wakefulness, my babe isn't born; how could my babe be born and I have no pain? and then remembering her fears, she exclaimed, How could my babe be born and I not die? She was soon convinced, and rejoiced in her happy relief.

Without material difference in the scenes of labor was Mrs. M., 1876. When I said, Madam, your babe is born, she replied, now, Doctor, you're fooling me. No, Madam, there's your babe at the foot of the bed, covered up. Touching it with her foot, she exclaimed, pahaw, that's Julia.

Also Mrs. F., 1879; hearing her babe cry she exclaimed, petulantly, Now, Viola, you always wake me just as I get into a nice sleep.

Also Mrs. R., September, 1872. Tedious first labor; mother weeping all night over the apparent sufferings of her child. Mrs. R., your babe is born. She replied promptly, Is my babe born? Well, Mother, I never felt one pain.

In all these cases labor progressed and terminated naturally; no vomiting, no drunkenness, no cessation of pains, no stertorous sleep, no instrumental interference, no hemorrhage, indeed, nothing but the regular inhalations, the regular pains, the natural delivery, and the perfect, prompt waking. Mrs. L., 1873, by advice of husband and friends, refused the anesthetic. I sat by her bedside offering her what comfort I could, while she labored as hard as I ever saw any one labor, from 9 P.M., until 3 A.M., when she became perfectly exhausted, and I said, "Now, Mrs. L., you are very foolish to suffer so when I have perfect comfort for you in my vest pocket." "Well, Doctor, if you're sure it won't hurt me I'll take it." Within five minutes she was at peace; no more pulling, no more treadmill arrangements, no more suffering. Labor advanced rapidly; in an hour her babe was born, and she rejoicing. Three children have since been born to her, all in dreamland. These cases represent the ordinary effect of the anesthetic; but there is a much finer effect possible with the very dry ether and chloroform of Squibb's manufacture, and I believe only with his can it be perfectly maintained. The condition requires careful administration of the anesthetic, but will well reward the effort. As examples, I mention Mrs. B., 1872. First labor. Early upon its onset, I administered the anesthetic. Then I invited her to visit her old home. I described the scenes; she conversed

freely, with apparently perfect confidence, interrupted only with each pain and her straining effort. When all was over, she told, with great delight, of her visit home, describing the scenes upon which we had conversed; she had been with the Doctor to the garden, to pluck roses; she saw the old willow tree at home, waving and waving, and that's the last; her babe was born entirely without a sense of pain or knowledge of the birth.

Mrs. C., 1874, almost immediately after the first inhalation burst out into a beautiful song, and continued singing one after another until her babe, a large boy, first child, was born. Her singing was interrupted only by the onset of each pain, when she would descend rapidly from her high, clear soprano to a low, moaning sound, until the pain had passed, when at once she is off again into an airy glee, all unconscious of the pain. This scene was repeated some two years later, upon the birth of a pair of fine boys, and I expect soon to see it encored, I hope, with a set of triplets.

Also of this character was Mrs. H., 1872, who spent the time singing and conversing, utterly unconscious of pain; her first child. So delightful was the scene that her sister-in-law, who resided in Baltimore, determined to come to Philadelphia for care in her approaching confinement. She came, but circumstances prevented my being present, and to her great disgust she was obliged to suffer all night under care of a gentleman who thought the pains all natural, and that a woman ought to bear them. Her next child was born under my care, in dreamland.

I will conclude these cases by the relation of two instances in which almost the entire brain was perfectly awake, so as not only to answer my questions, but to propound others; so as not only to grasp my imaginings, but to suggest other new ideas, and by word and gesture illustrate them, indicating by smile and play of features a perfect conception of the *ideal*, yet utterly unconscious of the *real*. I attended Mrs. M., the wife of a prominent minister in Philadelphia, in six labors; with five I had the ordinary effects of the mixture, as detailed. How well I remember my first attendance, her second child; when I said Mrs. M. your babe is born, her delighted cry, "Oh! Doctor, bless you for giving me that." In her last I determined to give her all the pleasure I could, and with Squibb's preparations I administered carefully. Soon she awoke in dreamland. I invited her to go with me to a Sunday-school anniversary; she consented, with pleasure. We went; I described the

scenes; she enjoyed it perfectly; interested herself in the speaking, and joined in singing one tune after another as I suggested them. Noticing her look intently, I asked why; she replied, "I can't see them exactly." Why, don't you see that little girl, with blue eyes and black, curly hair? don't you see her white dress? "Oh, yes," she replied, smiling, "now I see them," and her babe is born.

The other case went to bed at 10 P.M., second confinement, 1877; had been having pain for some time before my arrival; she was delivered at 6 A.M. During this entire interval she spoke as though perfectly awake. I invited her to take a ride in the Park. She said, "Thank you, Doctor, I would like to." John, bring the horses. Here they are, Mrs. C., aren't they beautiful; see that gray, how proud he looks, and that bay, how high he holds his head. "They are beautiful." Step in, Mrs. C. "Thank you, Doctor," and with a movement she is in, and we are off. I described the scenes as we passed, and she certainly saw them all. Upon entering the Park a beautiful "team" attempted to pass us, and we drive, all regardless of park regulations; we keep ahead, of course, much to her delight. We drive by the river and see a boat race; boys in red, boys in blue; and we are off to the "Wissahickon." A catfish supper is ordered for two. Mrs. C. will you take a boat ride while supper is preparing? "Thank you, Doctor." Here is the boat, Mrs. C., step in. "Isn't it dangerous, Doctor?" Oh, no; see, the man will row us; and with a motion she is in, and we boat along, delighted. I remarked how beautifully the branches interlace above us, from the trees on either side; she replied, "and how sweet they look, reflected from the water." Soon, with a waving motion of the hand, she said, "how nice to bathe the hand in the water as we float along." "Mrs. C., I hear the bell, supper must be ready, let us go in." She assents, and we return to find the supper nicely laid, and we proceed to discuss the dainties; Mrs. C. was helped to catfish, to waffles, to chicken, and the etceteras. "Mrs. C., wouldn't you be helped to something more?" "No, thank you, Doctor, I have eaten heartily." "Try some of this honey, it is very nice with waffles." "Well, thank you, Doctor, I will try a little." "Can I help you to anything else?" "No, indeed, not anything more." "Shall we drive home?" "I am ready." And we drive home in time to meet the babe, whereupon Mrs. C. is immediately awake to real life, and cannot be convinced that her trip is not real. To-day she

assures me that but for the fact of the impossibility, she could not be convinced that she had not taken that ride, so real it seems. This is the proper anæsthesia of labor, and should always be looked for. This effect and this constant use, more perfect as experience developed its possibilities, I taught my student, Dr. P., who graduated at Bellevue Hospital about 1871, and is now a successful practitioner in New Jersey; also Dr. H., his chum and fellow graduate, a successful practitioner in this city, whose wife I have had the pleasure of taking care of during the birth of two children, under the influence of this mixture; also to my student, Dr. G., a graduate of Jefferson Medical College, Philadelphia, now a successful practitioner in this city. The prejudice of public and professional opinion may have more or less deterred them from using anæsthetics as freely as I do. The pioneer is ever the martyr, and the tendency is very great to attribute every accident to the anæsthetic. I am satisfied this is unfair; but for twelve years I have never refused a single patient this comfort, more or less perfect, except where absolute contraindications existed on the part of the patient, or surrounding circumstances, without having seen a single misadventure; on the contrary, I have seen patients in the midst of labor, one, at present, comes to my mind, with expression in face and gesture of perfect peace and happiness, turn to her nurse, who was fearful of it, having never seen it given, moving toward her the "smoke-pipe," as she termed the inhaler, "Oh, Nurse, this is happiness; oh, this is comfort; what would I do without this? And I'm not asleep, Nurse; I know all I'm saying." This was her second confinement under my care, and she, though a poor woman, had returned to Philadelphia to be under the same comfort she had with her first babe. This, in greater or less degree, should be the pleasant course of all labors except where the individual case absolutely contraindicates. To this every woman is entitled, and for this she may and of right ought to hold her physician responsible; she may with every propriety claim that if she be able to bear the perils of childbirth alone, in its fury, she is equally able to bear the effects of this light stage of anæsthesia. The time is past when her suffering may be ignored by the learned physician, and every woman should perfectly understand that the old fashioned assurances, your pains are natural! you will not die! this is God's order for you! are simply and absurdly cruel, and should not be submitted to. If God allowed the pains, God sent the anæsthetic. Under the influence of this mixture I have

applied forceps, made version, performed craniotomy and controlled threatened convulsions, without ever having seen a single untoward or dangerous symptom.

The influence of this mixture upon the parts directly involved in labor, when parts are normal and labor natural, is simply to accelerate parturition; all the parts yield more readily, and being non-resistant the influence of each pain holds until its successor comes on. The danger of the head being forced through a resistant perineum by the frenzied exertion of the mother in that terrible moment of agony, does not obtain, since the frenzy is not present, neither the agony of the moment; on the contrary, a steady, painless pressure upon the non-resistant tissues induces relaxation and distention by natural law, with a minimum risk of laceration.

I never saw the arrest of labor pain; I believe such never occurs in the proper effect of anæsthesia, the law of which is never to allow a stertorous sleep; the accidental occurrence of a snore being the prompt, urgent signal for withdrawing the anæsthetic. *Arrest of labor means excess of anæsthesia.*

It is further to be especially noted, this stage of anæsthesia offers no obstacle to the use of any medication useful in its absence. Is the labor slow, the os rigid, the perineum resistant, a stimulant, a warm bath, or any other medication indicated? let one or all be administered. Ask your patient to take a glass of lemonade, and she will swallow any draught with pleasure. I am satisfied every artifice possible will acquire additional force through the anæsthetic influence, and should worse come, and instrumental interference be required, with how much greater safety may such be used for the calm, quiet, non-resistant woman, than for the frightened, pained, shrieking creature, who believes herself dying, and who is suffering more than death.

The depressing or sickening effect of ether or chloroform upon patient or child after labor, is, so far as I have been able to observe, not present, while the exhaustion, the weariness, the soreness resulting usually from a hard labor, is markedly absent.

Summing up, I think I have shown: 1. The claim of the parturient woman for anæsthesia is unequaled by any claim in the wide world.

2. These claims will not have received a fair response until the anæsthetic is as common in the lying-in chamber as upon the operating table.

3. A proper anæsthesia is more directly indicated and more safe in the ordinary obstetric

patient than in the surgical patient, case for case.

4. We have an anæsthetic mixture capable of producing perfect immunity from suffering, without intoxication, without vomiting, without reaction or dangerous sequences.

5. The babe offers no contra-indication, since its safety is not jeopardized.

6. Labor is not hindered, but rather hastened by the anæsthetic.

7. Anæsthesia offers no contra-indication for the use of any medication which would be indicated in its absence.

If all these or a majority of these be true, then I believe I have shown a strong moral demand on the part of suffering woman, upon the profession, not only to administer the anæsthetic, but to educate the people up to its sufferance, as in the case of vaccination against smallpox, or quarantine against epidemics.

1902 Spring Garden Street.

THE RECENT VITRIOL-THROWING CASE.

BY J. GILBERT YOUNG, M.D.,
Of Philadelphia.

About dusk of Christmas, 1879—as the city papers of the time fully detailed—Mr. George Shepherd, a citizen of Kensington, aged 67, had dashed over him, while standing at his front door, from the hand of an assailing neighbor, the contents of an ordinary shaving mug, perhaps nearly full of what was afterward ascertained to be *oil of vitriol*.

The caustic effects of the acid were mainly expended on the left frontal region, completely over and into the left eye, backward and downward over the left external ear, on the left side of the nose and left cheek, on the clothing over the left shoulder, about the lower attachments of the sterno-cleido-mastoides, on the left wrist, and a trace into the anterior portion of the mouth.

Blinded, and dazed, and frantic with pain, although a messenger was instantly despatched to my office, half a square away, the victim of this atrocious assault, himself, was met by me on the street, hurriedly taken to his home, and there, as quickly as possible, treated.

His face, eyes, mouth and other wounds—as fast as his rotten, pasty-feeling clothes could be removed—were freely washed, first with water, then with a weak solution of sodii bi-carb., and subsequently dressed with cosmoline, which, although various other applications were afterward tried, seemed to favor the healing process best of all, and was persisted in.

When the primary action of the caustic was stayed, the consequent inflammation produced various conditions: The cornea and a portion of the sclerotic of the left eye were almost immediately deprived of conjunctiva, and the anterior surface of the ball generally had the appearance of boiled white of an egg. A rapidly corroding ulcer of the cornea soon evacuated the aqueous humor, the entire cornea sloughed, and the iris was the most anteriorly presenting surface of the ball. Eventually, this pigmentary curtain also disappeared and the abrupt edges of the sclerotic attaching themselves in the neighborhood of the suspensory ligament of the lens, the destructive work, so far as the deeper structures of the eye were concerned, was apparently at an end. This result was perhaps attained about four weeks after the injury was received. Coincident with the ulcer of the cornea, a most provoking, sloughing and perforating ulcer of the upper lid occurred, which, before it was arrested, threatened the complete loss of that organ. Either from a slight entrance of acid or from sympathetic action, the right eye, too, was, for a couple of weeks, the seat of a moderately active conjunctivitis, which required special treatment.

About the left ear the action of the corrosive was so intense that at one time it looked as if the lower half of the auricle would be completely severed from its attachment to the commencement of the auditory canal, and a deeply sloughing lesion in front of the tragus, one night, proceeded so far as to slightly open the temporal vein and cause a hemorrhage, which, before it was stopped, was, considering the low condition of the patient, truly alarming.

A small portion of the acid must also have been received into the mouth, for the tops of several of the front teeth were partially disintegrated, and after several days, a slough, about one inch square, peeled from the point of the tongue, leaving a raw surface; while, to complete our recital of lesions, several burns appeared on the neck and forearm, in the form of narrow grooves of deep ulceration, caused by the trickling of the caustic fluid in these situations.

That, then, an injury so terrible should prove fatal to my elderly patient, from *shock* alone, was believed by most intelligent people who saw the case. Indeed, for so many days did he lie in his darkened room, with a pulse so intermittent and feeble, and with so slight an improvement from day to day, that I myself despaired likewise. Gradually, however, under the almost hourly use of brandy and raw custard, and by the ceaseless administration of quinine and dia-

lysed iron for weeks, the pulse filled and steadied, and the system regained its normal tone, and to-day, eight weeks after his hurt, barring the loss of his left eye, he is, in weight, appetite and appearance, as well as when he ate his Christmas dinner.

As might have been expected, the loss of structure in the upper eyelid, when the cicatrice began contracting, resulted not only in slight *ectropium*, which may yet increase, but also in a considerable *lagophthalmos*, and, owing to general contraction of all parts surrounding the lids, but especially of the orbicularis muscle, the *palpebral fissure* is already shortened one-fourth horizontally.

Without further comment, I may say that the most perplexing question in the treatment of this case, after the patient's constitutional improvement, was, whether it were better, for the sake of reducing probable deformity to a minimum, to allow a threatened *anchyloblepharon* to occur, and thus obliterate the palpebral fissure altogether, or by the frequent separation of the lids with my oiled probe, to, as far as practicable, avoid *anchyloblepharon* and *symblepharon*, and thus admit of the future use of an artificial eye. I chose the latter alternative, and, comparing Mr. Shepherd's case with another—by a rare coincidence, in my office at the same time with him, to-day—in which the palpebral fissure had been permitted to close permanently, for natural appearance sake, I would unhesitatingly pronounce in favor of my own patient's good looks.

1000 Shackamaxon St., Feb. 18, 1880.

HOSPITAL REPORTS.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF PROF. LOUIS A. DUHRING, M.D.

Reported for the MEDICAL AND SURGICAL REPORTER.

Tinea Sycosis.

The patient was a middle-aged German, who presented a single patch of disease, the size of a silver half dollar, situated in the bearded portion of the cheek, which had been recently shaved. The eruption was of three weeks' duration; it had begun as a single small lesion, and had gradually spread to its present dimensions. It was composed of an aggregation of small tubercular, pea-sized nodules, of a fleshy character, dark red in color, at some points slightly scaly, and covered with hairs, of which a number were broken off short, not far from the surface. There were no pustules. The eruption was very slightly annoying; the patient complained of a trifling itching sensation. He attributed the origin of the disease to shaving at the hands of a strange barber.

The case, Dr. Duhring said, was a mild one, but was well marked in its essential features. On pulling at the short hairs over the diseased patch they are seen to be loose and easily drawn out of their sacs without carrying the root-sheath. The disease is painless and gives the patient but little discomfort. It is an example of *tinea sycosis*, commonly known as "barber's itch." Difficulty is sometimes experienced in distinguishing this disease from non-parasitic *sycosis*, but this need not occur if the characteristic features of the respective affections be borne in mind. In *tinea sycosis* the process generally involves the deeper tissues of the skin, causing usually induration, with the formation of more or less large, firm papules and tubercles. In *sycosis non-parasitica* the inflammation is non-acute, the hair follicles are chiefly involved, with the formation of pustules and free suppuration. The pain, itching and burning, in *tinea sycosis*, are seldom severe, and often, as in the present case, almost entirely absent. The hairs are loose and may be plucked out without pain. In severe *sycosis non-parasitica* throbbing pain and burning are often most distressing. The hairs, except when free suppuration has taken place about their roots, cannot be extracted without pain.

The treatment in this case shall consist, in the first place, in daily depilation, by the aid of appropriate forceps and subsequently in thorough inunction with the following ointment:—

R. Hydrarg. sulphatis flav., gr. xv
Adipis, 3j. M.

The prognosis is favorable. Under appropriate treatment cases recover rapidly, although relapses, which should be guarded against, may take place. The disease, you must remember, is contagious, and due precautions should be taken to prevent its transmission.

Seborrhœa Corporis.

The patient, a middle-aged man, presented an eruption seated upon the chest, and composed of circinate, annular and superficially-seated patches of rather pale-reddish skin, covered with small, light, rather greasy-looking scales, more noticeable about the periphery. The scalp and also the side whiskers were filled with loose and adherent, bran-like, grayish-yellowish, greasy scales. No other portions of the body were affected.

This affection, Dr. Duhring said, although of not infrequent occurrence, is not often seen at this clinic. It usually gives the patient so little annoyance that he is not likely to seek relief from it, and it is ordinarily discovered by accident. *Seborrhœa capitis*, on the other hand, is of more frequent occurrence at the clinic. The diagnosis of *seborrhœa corporis* is occasionally difficult, as it may be mistaken either for psoriasis or *tinea circinata*. From the former, however, we can distinguish it by the history and by its distribution. Our patient tells us the disease has been present for two years, in a very nearly stationary condition, neither better nor worse, showing no inclination to spread, and with the exception of the scalp and beard, not occurring elsewhere over the surface. Were the disease psoriasis we should be apt to find some patches of the disease in other parts of the body, particularly about the

extensor surfaces of the extremities and about the knees and elbows. In addition, the affection would not have remained so long at a stand-still; it would have changed from time to time, for better or worse. When we come to examine the eruption more closely, we observe that the sebaceous glands are the seat of the affection; they are evidently inflamed, and have poured out their secretion in abnormal quantity. The affection, it will be observed, tends to spread on the periphery while it heals in the centre. This may give rise to the mistake of confounding it with *tinea circinata*; but a microscopic examination of the scales, showing the presence or absence of the characteristic fungus, the *trichophyton*, would settle the question. In addition, it may be said that *tinea circinata* spreads with much greater rapidity.

The treatment in *seborrhœa corporis* must usually be both internal and external. We usually find the subjects of this affection more or less debilitated. This man, as we learn, is under treatment for some thoracic affection. In such cases, tonics, such as cod-liver oil and iron, and arsenic (in small doses), are called for. By way of external treatment, nothing is better than an ointment of sulphur, preferably weak. The following will serve our purpose in the present case:—

R. Sulphur. precipitati, 3ss
Adipis, 3iv. M.

This is to be well rubbed into the affected parts, morning and evening.

Dermatitis from Dye Stuff.

The patient was a workman in a dyeing establishment, his duty being to wring out bundles of yarn as they were drawn from the vats. The eruption was for the most part confined to the hands and forearms, which were somewhat swollen, and of a violaceous red, and covered with scattered pin-head papules, pustules, crusts and scratch marks. The hands were also fissured in the flexures of the fingers; burning and very painful. In the skin of the forearms there was rather more itching and less burning. A patch of inflamed skin could be seen on the left side of the nose and cheek, where the man was accustomed to wipe his nose with his hand. He said he had suffered from the same eruption the previous summer, but it had disappeared upon his leaving his employment. When he began work in the dye works again, a month or two ago, the skin was quite well, but it soon began to show signs of irritation, and had grown steadily worse.

Dr. Duhring remarked that the case was one of typical acute artificial dermatitis. This man presents a simple inflammation of the skin on the forearms and nose, evidently the result of the action of certain acid substances contained in the dye in which he works. The first step to be taken in the cure of this affection is for the patient to stop his present work. If he cannot do so, the treatment is useless, or at best, only palliative. If he can, the affection will speedily subside under the simplest local treatment. We shall direct the following lotion to be kept applied by means of cloths:—

R. Extr. grindeliæ robustæ, f. 3ij
Aque, Oj. M.

(The man returned in a few days, nearly well, having relinquished his work and kept the lotion constantly applied.)

Tubercular Serpiginous Syphiloderm.

The patient had been under treatment in the clinic six or seven years previously, with tubercular syphilitic eruptions about the elbow and leg. He had, however, never attended regularly, and had been entirely lost sight of for several years past.

The affection for which he now presented himself was a serpiginous annular arrangement of tubercular ulcerating lesions, covering a space about twice the size of the palm, upon the anterior surface of the right thigh. There were also several well-developed but painless nodes of large size over the forehead. The patient had been using iodide of potassium and mercury freely for several months, but without benefit.

Dr. Duhring drew attention to the configuration of the eruption, which gives it its name, the serpiginous ulcerating syphiloderm. The lesions incline to heal in the centre, which is here seen to show a cicatricial character, while they spread upon the periphery. This form of syphilis is usually one of the later manifestations of the disease, which, in this instance, dates back nearly ten years in its origin. The serpiginous syphiloderm is ordinarily rebellious to treatment. This man has been taking the usual anti-syphilitics for several months, without avail. These shall now, for the present, be discontinued, and the patient shall be placed upon cod-liver oil and iron, with nourishing diet. When his general health, now somewhat impaired, shall have improved, we shall again resume the especial anti-syphilitic treatment, at first in small doses, expecting more satisfactory results from its influence.

MEDICAL SOCIETIES.

OBSTETRICAL SOCIETY OF PHILAD'A.

At the regular meeting of the Society, February, 1880, Dr. D. M. Barr read an article on

Anæsthesia in Labor,

given on page 221. After its reading

Dr. De F. Willard said that the secret of Dr. Barr's success in escaping the unfortunate results which so frequently occur was undoubtedly due to the fact that he had acquired a facility in administration which enabled him to keep his patients just at that blissful point which exists in the early stage of anæsthesia, in which pain is obtunded and yet consciousness is exalted. He had frequently seen this condition of joyous hallucination in chloroform anæsthesia for surgical purposes, and it was a stage in which many minor operations could be performed without pain to the patient. The alcoholic fumes from Dr. Barr's mixture would assist the chloroform in producing such a condition, and the dangers would certainly be far less than if profound sleep were induced.

Remarks and criticisms upon the paper were also made by Drs. Goodell, O'Hara, Prall, Bernardy and others.

Dr. Barr, in closing the discussion, said: I have some words I wish to say, in reply to the comments just made; but first I will state I have attended two ladies since writing this paper; both are in bed. One of the ladies, after the birth of the child, assured me—"Doctor, I never felt a pain, but I knew what you were doing all the time, and all that was going on around me; I fought against the influence, for fear you would use instruments." The other was the most perfect effect of anaesthesia I ever saw. Previous to her confinement, upon making my engagement, I explained the effect I expected; both herself and mother-in-law were much surprised, having never heard of it. They told some neighbors, who laughed at "such an idea," "either the pains would go on, or the labor would stop." "Well," said the mother-in-law, "in a few weeks I shall have an opportunity to test it." This lady, upon pains becoming very hard, by advice of the nurse, sent for me, at one A.M. I arrived at two. She took the anaesthetic, and after a few inhalations she passed into sleep, in which she followed my leadings perfectly; passed through all the experience of a boat race, drive to Wissahickon, catfish supper, etc., and so perfectly clear was she, that when I asked her to ride she hesitated to accept, I saw at once, from a moral sense of propriety, I being a stranger. I told her, your mother, Mrs. Mason, goes with us, whereupon she consented; when boating, she assured me she was never in a boat before; "isn't it delightful." When I asked them to supper, "What time is it, Doctor?" "Five o'clock." "Oh! I must go home; husband will be home to supper; he is tired; he has a sore hand." "Oh no," said I, "your mother has arranged to have him here to supper; see! there he is now." "Why yes, there he is; I'm so glad." At supper she took the catfish, but declined the chicken, and also ice cream, which, her mother said, was her custom in ordinary. After coming home I gave her a peach, which she enjoyed greatly. I said, "these peaches are from that basket." "Oh, aren't they beautiful." Letting, now, the effect become light as possible, and seeing a pain come, I said "Mrs. M., please help me move this basket over?" "Certainly; oh, it's heavy." "Yes, pull." "Oh! it's very heavy." "Yes, pull hard." Pain subsides. "Now it's over, isn't it?" "Yes, now it's over, didn't I help you nice?" "You didn't do much of the lifting, you left all the weight on me, I notice that: with next pain and next basket, "Oh! I can't; oh! it's too heavy; I must go home, my husband wouldn't approve of my staying here, lifting these heavy baskets." It was now 12 M.; labor had been hard all the time, and head detained above the brim. My anaesthetic was becoming scarce; had used nine ounces of the mixture; had but two on hand. The narrow rim and small pelvis obliged me to place the forceps and deliver; had rupture of perineum, which I was obliged to stitch; all this with about two ounces of the mixture. In consequence, she suffered some. Had I been better supplied, she would never have known aught but her dreamings, which to-day are perfect in her mind, while even the memory of the forceps and operation are blurred and dim.

There are certainly cases when anaesthetics are contra-indicated, and must not be given, but those cases are the exception, not the rule. The question, Must I give it? should give place to, Must I refuse it?

Dr. Goodell's case should certainly have had the ergot. To blame the anaesthetic when properly indicated medicines were not used is unfair.

In reply to Dr. O'Hara, I would say, while the anaesthetic should be administered with the same care as though chloroform alone was being administered, abundance of air being always allowed, yet the stimulating influence of the ether, preceding the influence of chloroform, does away with the danger of the paralyzing tendency of chloroform, in a marked degree at least, if not entirely.

In regard to the woman who died from a few whiffs of chloroform, I have only the same reply. The assertion stands upon record, from high authority, "Every death from ether involves the probability that if the administration could be again gone over, death would be avoided." I believe this mixture, in the lighter anaesthesia of the lying-in room, to be more safe than ether alone on the operating table.

To Dr. Prall. In regard to fooling the patient, by giving none or too little, when she pleads for it, the doctor will be disappointed if he expects to thus deceive a lady who has ever known its true influence.

Dr. Ladlow gives us no guide as to when we should use or refuse it. I will say, if the doctor refuses it to the majority of his patients, he certainly fails to give them the comfort they have a right to expect at his hands. That alcohol is volatile, and also stimulating, he will certainly prove by entering a cellar where it is kept, or breathing upon an inhaler wet with it.

To Dr. Bernardy I would say, if he uses ether he will get vomiting and drunkenness, with possibly dangerous sequences. If he uses chloroform he may get profound anaesthesia, arresting labor. With this mixture, vomiting and drunkenness on the one hand, in its early influence, profound anaesthesia, with arrest of pain, in the later, as well as increased danger from third stage of labor, may be avoided, I believe, absolutely, except in such possibly rare individual cases where the anaesthetic effect is plainly contra-indicated.

The Pellagra in Italy.

The *Lancet* informs us that ninety-seven thousand Italians are dying of pellagra. About one-half of the provinces of Italy are desolated by this scourge. The number of the victims represents 3.62 per 1000 of the total population of the Peninsula, or 0.21 per 1000 more than the worst cholera epidemic that ever swept over France. If we restrict our consideration to the infected regions only, the proportion becomes still more terrible, and oscillates between a maximum of 11.70 per 1000 in Lombardy, 11.08 per 1000 in Venetia, and a minimum of 0.09 per 1000 in Latium. In France, in the cholera visitation of 1834-35, the proportion in the infected departments only was 10.42 per 1000 of the population for the sick, and 4.73 per 1000 for the dead.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Treatment of Chronic Nasal Catarrh.

In the *American Journal of the Medical Sciences* for January, 1880, we find an article on a new method of treating chronic nasal catarrh, by Harrison Allen, M.D., Professor of Physiology in the University of Pennsylvania, in which the author points out that, in the normal nasal chamber the turbinated bones do not touch the nasal septum, neither do the middle or inferior turbinated bones impinge on each other, or the floor of the nose. Should, however, chronic nasal catarrh be present, the middle turbinated bone is often seen lying close against the septum, or the inferior turbinated bone is found occluding the inferior meatus.

But the mere contact of the anterior portion of the middle turbinated bone against the septum should not be looked upon as of necessity an exciting cause of nasal catarrh. Not infrequently perfectly healthy persons will exhibit such contact over a small surface. But in such instances the contact is often found to be slight—the apposed surfaces barely touching—and a probe can be passed without pain or sense of obstruction. In the contact which has clinical significance we should expect firm pressure of the scroll and septum against one another, and some pain to follow manipulation.

When the point of contact is recognized, the indication for treatment is to destroy it. This is accomplished by means of local remedies applied to the mucous membrane at and about the places of contact, or, in examples of abnormal deflection of the nasal septum, by removal of the offending portions of bone. In the case of the inferior turbinated bone, the swollen and engorged tissues occupying the inferior meatus may be removed by the knife.

To make topical applications to the interior of the nasal chamber, the author employs a simple cotton carrier, closely resembling the instrument in common use by the aurist. It consists of a single tapering rod of soft iron, slightly roughened at the smaller end, for convenience of holding a pledget of absorbent cotton, and fixed in a small wooden handle at the other. A wooden handle is preferable to a metallic one, since the latter is liable to fall out of the nasal chamber from its own weight, if the hand supporting it be removed for but a moment. It may be bent at an angle, and the absorbent cotton can be steeped in any desired substance, and carried to the spot selected through the nasal speculum. The pledget of cotton should be moistened in water and warmed for an instant over the flame of the lamp. Thus prepared, it does not irritate the mucous surfaces more than any other intruding solid substance. After employment of various agents, the author has found the best results from a combination of tannic acid with carbolic acid or iodoform, held in suspension in gelatine. The object of employing gelatine rather than water or spirit, is to enable the

medicine to remain for a long time in contact with the affected parts, and, in dissolving, to form a thick fluid which measurably imitates the consistency of the normal secretions of the parts.

The following formulæ are those ordinarily made use of by the author:—

Stiff iodoform preparation, with geranium and carbolic acid:—

R.	Pure carbolic acid,	grs. v
	Fl. ext. geranium maculatum,	gtt. xv
	Distilled glycerin,	gtt. x
	Powdered iodoform,	ʒ iijss
	French gelatine,	ʒ j
	Water,	q. s.

Dissolve the gelatine in a little water, then add the other ingredients, and rub to a smooth paste.

Stiff iodoform preparation without geranium:—

R.	Pure carbolic acid,	grs. v
	Distilled glycerin,	gtt. x
	Powdered iodoform,	ʒ iijss
	French gelatine,	ʒ j
	Water,	q. s.

Dissolve the gelatine in a little water, then add the other ingredients, and rub to a smooth paste.

The Value of Parallelism in the Treatment of Disease and Injuries of the Hip.

The *Lancet* informs us that at the meeting of the Medical Society of London, on the 12th of January, 1880, Mr. Bryant read a paper on the value of Parallelism of the Lower Extremities in the treatment of hip disease and hip injuries, with the best means of maintaining it. The author first pointed out how it was that in most of the deformities of the lower extremity following a natural recovery with a stiff joint, after hip disease or injury, the deformity was due to a want of parallelism of the lower extremities, and then passed on to demonstrate, by means of a simple instrument he had constructed for the purpose, that, as a rule, in such cases the deformity is produced by the adduction of the affected limb. He conclusively demonstrated that when the hip joint is fixed in an adducted position, and the patient attempts, for walking purposes, to bring the limb vertically downward, the pelvis on the affected side is tilted upward, and on the sound side downward, with the result of increasing the shortening of the affected limb. On the other hand, when the ankylosed limb is abducted and the foot is brought down for the purposes of progression, the pelvic line on the diseased side is lowered, and the affected limb is merely apparently elongated; apparent lengthening of the diseased limb in hip disease meaning its abduction, and apparent shortening its adduction. Under these circumstances it is clear that only by maintaining parallelism of the two limbs in such cases can deformity be prevented. For this purpose the use of the double splint, which he has had slowly built up under his eye at Guy's, was strongly recommend-

ed, for he maintained (1) that it is far more comfortable to the wearer than any other he had used or seen used; (2) that it most thoroughly immobilizes the limb to which it is applied; (3) it keeps up well-regulated, steady and persistent elastic extension; and (4) maintains absolute parallelism of the lower extremities. In children with acute hip disease, the splint, when well applied, so securely guards against joint movement that the nurse may turn the child over on to the sound side, for purposes of cleanliness, and lift him, for the performance of the natural functions, with freedom and confidence. In cases of fracture of the neck of the femur or shaft, the same principle is applicable and the same splint of value; in proof of which the author stated that thirty consecutive cases of fracture of the neck of the thigh bone, occurring in patients averaging seventy-four years of age, left his wards with useful limbs; and that out of forty consecutive cases of fracture of the shaft of the femur, in only four, or one in ten, was there any important shortening, such as an inch. In twenty of the remainder there was no shortening, and in eighteen there was less than half an inch.

Safe and Convenient Means of Producing Anaesthesia of the Larynx.

Wm. C. Glasgow, M. D., of St. Louis, Mo., in a paper read before the American Laryngological Society, and published in the *St. Louis Courier of Medicine and Collateral Sciences*, Dec., 1879, says:—

During the past winter I have been experimenting with two remedies, both of which produced in a measure, not only the desired anaesthesia, but also relief from pain. I refer to the hydrate of chloral and carbolic acid. Both remedies have been extensively used in throat practice, but as far as I am aware, they have never been suggested or used for the purpose of producing anaesthesia of the larynx.

The hydrate of chloral is decidedly inferior to the carbolic acid, and it is to this last that I would specially direct the attention of the members of this association. As typical experiments, I give the following cases, illustrative of many, on which I have founded my belief in the anæsthetic property of strong solutions of carbolic acid.

CASE 1.—A case of phthisis, with an enlarged hyperæsthetic follicle in the pharynx. The pain on swallowing was so severe as almost to prevent the taking of food. The solution of carbolic acid, in volume 1 to 5 of water, was applied to the follicle. An intense burning sensation was experienced, which lasted twenty seconds. This was followed by complete relief, and the act of swallowing was performed without pain. The application was made daily, one-half hour previous to the evening meal, which could then be taken with great comfort.

Other cases are given and the following conclusions drawn:—

1st. Carbolic acid in strong solutions produces anaesthesia of the larynx and relieves pain. The application causes an intense burning, which lasts about twenty seconds; the anæsthetic condition continues about two hours.

2d. The hydrate of chloral in strong solution applied to the mucous membrane produces anaesthesia. The application causes a severe burning pain, lasting over a minute; the anaesthesia does not continue longer than half an hour.

2d. The strength of the solution necessary to produce anaesthesia varies somewhat in different persons.

4th. It is recommended that the weaker solution be applied first, and this can be followed by the stronger solutions. The first application is the only one causing pain.

6th. No bad results, either constitutional or local, have followed the application of strong solutions of carbolic acid.

The Pneumatic Cabinet.

J. H. Tyndale, M. D., of Maniton, Col., in an article on climatic and home treatment of pulmonary phthisis in Europe, published in the *St. Louis Courier of Medicine and Collateral Sciences*, Dec., 1879, says:—

The use of the *pneumatic cabinet* and *transportable pneumatic apparatus* is still practiced extensively. Since the introduction of Waldenburg's apparatus for inhaling compressed air, movable and immovable apparatus have been invented in great number. Compressed air, diluted air and nitrogen are employed for inhalation, with exhalation into diluted air, compressed air or the ordinary atmosphere. The result of either method, and all of their modifications, may be summed up in this: Bronchial asthma has been greatly relieved, and by continued use cures have been effected; the general condition of consumptives has been somewhat improved by increased metamorphosis of tissue; expectoration has been facilitated by the exercise. All reports agree in this, that cases have only been improved. Disappearance of a well-defined infiltration or healing of cavity has not been noticed.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—A pamphlet containing a clinical-surgical lecture on Lateral Curvature of the Spine, by Lewis A. Sayre, M. D., has been received.

—In a reprint from the *St. Louis Medical and Surgical Journal* for December, 1879, Dr. F. F. Dickman, of Fort Scott, Kansas, gives the history of a rare case of perineuritis.

—In a reprint from the *Western Lancet*, W. F. McNutt, M. D., of San Francisco, reports a case of ovariectomy performed on a patient 67½ years of age. Weight of the tumor, sixty pounds; extensive adhesions; recovery.

—Mr. Horace J. Smith, of this city, who has passed several winters in visiting the health resorts of Southern California, has published in

the *Philadelphia Press* a full description of the Ojai Park. He considers it is decidedly superior to Santa Barbara. He states that it is "more dry, and has a greater diurnal variety of temperature, and a freedom from any possible saline harshness of a littoral location. Asthmatic patients who cannot endure the seaside find here a perfect immunity from their disease; consumptives recover; and victims of chills and ague lose their complaint." Mr. Smith adds, "I will be glad to furnish meteorological tables of this place, and further information, to physicians or members of the Pulmonary Exiles' Club."

BOOK NOTICES.

A Manual of Auscultation and Percussion; Embracing the Physical Diagnosis of Diseases of the Lungs and Heart, and of Thoracic Aneurism. By Austin Flint, M.D., Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College, etc. Second edition, revised. Philadelphia, Henry C. Lea, 1880. Cloth, 12mo, pp. 240. Price \$1.75.

This work contains the substance of the lessons which the author has for many years given, in connection with practical instruction in auscultation and percussion, to private classes composed of medical students and practitioners. Prof. Flint is so well known as a medical teacher and writer that it seems superfluous to state that the subject has been treated in a thorough and systematic manner, and the favor with which the first edition has been received has seemed to show that no radical changes were required. In revising it for a second edition, therefore, the author has confined himself to such additions as seemed likely to render it more useful, not only to students engaged in the practical study of the subject, but also to practitioners, as a handbook for ready reference, and we do not hesitate in saying that it would prove a valuable addition to every physician's library. The little volume before us is neatly printed on good, solid paper, and handsomely bound.

Eyesight; Good and Bad. A Treatise on the Exercise and Preservation of Vision. By Robert Brudenell Carter, F.R.C.S., etc. With numerous illustrations. London, MacMillan & Co. 1 vol., small 8vo, cloth, pp. 262. Price \$1.50.

The well known surgeon to St. George's Hospital has in this little work proposed to himself to familiarize to patients and their attendants those precepts and injunctions about the care of the eyes and the preservation of the sight which

they all should know and understand. It is a popular book on the eyes, not intended for the profession, although it contains what every professional man ought to know, and, perhaps we can say, ought to learn. The topics treated begin with chapters on the structure of the eyes, the nature of light, the forms of lenses, near and distant vision, convergence, myopia, astigmatism, etc. These are followed by brief explanations, color blindness, with directions for the care of the eyes in infancy and childhood, and adult age, the influence which the general health and habits have on the sight, plans of lighting, and concludes with a series of practical hints on spectacles.

Coming from the source it does, it is needless to say the advice is sound and the subject well handled; but a slight examination will show that the author is altogether too technical to obtain any large general reading. It is a matter of extreme difficulty to write on such a topic for non-medical readers; and we do not think Mr. Carter has succeeded in this respect.

Sore Throat, its Nature, Varieties and Treatment; including the connection between Affections of the Throat and other Diseases. By Prosser James, M.D., Lecturer on Materia Medica and Therapeutics at the London Hospital; Physician to the Hospital for Diseases of the Throat and Chest; Late Physician to the North London Consumption Hospital, etc. Fourth edition, illustrated with hand-colored plates. Philadelphia, Lindsay & Blakiston. 1880. Cloth, 12 mo. pp. 318. Price \$2.00.

This little work originally appeared at the close of 1860, and was the first, and for about three years the only, English book on the laryngoscope. Having since then passed through three editions, the author has deemed it necessary to thoroughly revise it, making such changes and additions as further experience has suggested. In the fourth edition several alterations in arrangement have been made, and fresh paragraphs have been interspersed throughout the work. Four new chapters—on syphilitic sore throat, on affections of the naso-pharynx, on connection of sore throat with affections of the nose and ears, and on affections of the œsophagus—have also been added, and the plates are likewise new. Dr. James being the first English worker with the laryngoscope, and having for years enjoyed rare facilities for observation, as physician to the hospital for diseases of the throat, as well as other public charities, among which a hospital for consumption, his work is unquestionably the best text book on the subject in the English language.

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D. G. BRINTON, M.D., EDITOR.

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THE EXTENSION OF THE PATENT MEDICINE TRADE.

The extension of the traffic in secret nostrums cannot fail to be a matter of serious moment to physicians and to all who have the sanitary welfare of the community at heart.

Is it necessary that an explanation should be given as to how secret nostrums injure the people? We believe not; certainly not to the class who read this journal. But it is quite appropriate to bring some facts to show that the quack medicine trade is not dying out, as some fondly suppose. With increasing intelligence all over the civilized world, it seems, if anything, their consumption actually increases; in spite of laws and prohibitive enactments by governments, they are demanded and devoured by the populace with the most wonderful relish. In fact, they seem, like religious sects, to flourish under persecution. In Germany, where their sale is prohibited by law, the stupidest remedial swindles are popular. In Russia a paternal government watches at the gates of entry for them, and

prohibits all but a favored few. That these are selected with any serious discrimination it would be an insult to pretend. All sorts of precautions are taken in France against dangers resulting from unofficial combinations, and yet Paris is the centre of a trade in them of enormous proportions. In England the magnitude of the trade may be judged from the fact that last year the stamp duty on them amounted to over \$660,000, and over 19,000 persons took out licenses to engage in their sale.

This state of affairs is justly exciting the attention of enlightened statesmen in Europe, and the question is seriously discussed how to check this hurtful traffic. One such attempt is now being made to keep them out of Switzerland. A bill has been introduced into the Swiss Federal Assembly which prohibits the sale or advertisement of secret or special medicines which contain poisonous or very active substances, or of which the price is out of proportion to the value of the ingredients, or if the advertisement shall be injurious to public morality, or if the medicines are recommended for acute diseases. A commission of competent men is to be appointed to decide what are the specialties which fall under either of the named sections. Penalties of 20 francs to 200 francs are imposed, and publishers of journals are to be held responsible for advertisements of interdicted remedies in their pages.

In Belgium the druggists themselves are moving in the matter. "Almost all the pharmaceutical associations of the country," says the *Antwerp Journal of Pharmacy*, "have petitioned the Legislative Chambers to prohibit the sale of the specialties and secret remedies with which foreign countries inundate us. We beg those of our readers who reside in towns where there is not a pharmaceutical association to sign a similar petition and forward it to the Legislature without delay."

Of course, such action meets much carping comment from trade journals, whose patrons never allow their ethical notions to rise above the level of their breeches' pockets, for fear of injuring the contents of that, their most import-

ant viscus. They don't consider such action at all consistent with "push" and "vim." They have even succeeded in enlisting in their ranks some of our own profession, those, we imagine, who enjoy that pleasant thing, a "royalty," on some of these "proprietary preparations," as they are euphemistically termed. We observe that a society of "specialist physicians and pharmacians" has been formed in France, for the defence of the interests of specialism in general. They have undertaken to draw up a new law on the subject, which will soon be presented to the Chambers of Legislature. And they invite the co-operation of all interested in the business. The precise limits which this society propose putting to their benevolence is not yet known to us; but we should imagine it will depend entirely on the maxims to be found in the modern Bible and Testament, known familiarly as the Day Book and Ledger.

NOTES AND COMMENTS.

The Cystoscope.

This is an ingenious but rather complicated instrument, by means of which the bladder may be illuminated, and an optical examination made of it and the urethra. It is invented by Dr. Nitze, of Vienna, who has described it in detail in the *Wiener Med. Wochenschrift*.

The cystoscope differs from the old endoscope in the method of illumination. The light is not reflected from without, but is generated in the interior of the organ itself. Its source is a loop of platinum wire heated by a galvanic current. To avoid the injury to the parts which the heat of this loop would otherwise cause, it is kept continually cool by a stream of water running through a double system of tubes. The light emanating from the wire diffuses itself in the cystoscope through a small window of rock crystal in the side of the lantern enclosing it, and which forms the terminal bend of the endoscopic tube—the short, curved portion of the catheter. In the *urethroscope* the loop of wire, with its cooling apparatus, lies close to the external wall of the catheter, very near its internal orifice (which is cut off obliquely), and out of the axis of the tube. In the cystoscope the interior of the bladder, illuminated by the lantern, is observed through a second window, anterior to the

latter in the straight portion of the catheter, by means of a prism, which acts by total internal reflection, and transmits the image to the "optical apparatus," which occupies the rest of the anterior part of the catheter. This consists of an objective of small focal length, which forms in front of it a small real inverted image of the mucous membrane, of a lens in the middle of the tube, which converts the inverted into an upright image, and of an external eye piece, which transmits to the observer's eye a magnified, upright representation of the object. The lenses are so arranged as to be capable of accurate focusing. This optical apparatus is adapted equally to the cystoscope and urethroscope.

Intravenous Injections of Milk, etc.

In his recent presidential address before the Obstetric Society of London, the well-known obstetrician, Dr. W. S. Playfair, referred to the recent researches of Mr Schäfer on intravenous injections. He stated that the first important result of this investigation is that it disposes, once and for all, on indisputable grounds, of the use of milk, beef tea and other fluids instead of blood. "Within the last year or two Dr. Thomas, of New York, and others in America, have published cases in which transfusion has been performed with such agents, of which the most that can be said is that some of the patients survived in spite of the operation. Mr. Schäfer's researches into the action of such fluids on the blood corpuscles will, I cannot but think, insure our not hearing more of such experiments. The operation is one in which I have myself always taken great interest, and after a careful study of all that had been written on the subject, I had come to the conclusion that the use of defibrinated blood with a simple syringe best fulfilled the indications which seemed to me essential for success, viz., simplicity of apparatus and ease of performance; and this was the method I had adopted in several cases in which I had performed it after severe post-partum hemorrhage."

Isolation for Syphilis.

How easy it is to choose the hardest plan to accomplish an end! Two of our exchanges for February come out in determined advocacy of absolute isolation for syphilis. *Place aux dames!* Hear Mrs. Sawtelle, M.D., of the *México-literary Journal*, San Francisco: "Make some stringent sanitary laws compelling every physician to report all venereal cases, and see that all such patients are isolated until cured or buried out of

sight, and not allow them, as now, to run at large, to contaminate the unsophisticated. The people demand protection from the strong arm of the law against this great crime."

And here speaks Dr. G. B. Walker, of Evansville, in the *Indiana Medical Reporter*: "Willing or unwilling, the syphilitic should be separated from the healthy and placed in hospitals, as well for their own benefit as for the welfare of others, and be permanently denied connubial bliss, for the good of posterity. Prevent the diseased from propagating offspring, and it is evident that in a single generation this terrible scourge must take its place among the things that were."

The object is excellent. But cannot these worthy people be persuaded to advocate something possible in this line, and not such an absurd impossibility?

Nerve Stretching in Obstinate Sciatica.

At a recent meeting of the Harveian Society, London, Mr. Walter Pye read a paper on nerve stretching. A patient had suffered for many years with severe sciatica, for the treatment of which huge doses of morphia had been used. The patient was in severe pain when not under the influence of morphia. The nerve having been laid bare, it was pulled backward and forward, forcibly, with from eight to ten pounds pressure. The wound healed well, the pain was lost, and some paresis followed. The paresis wore off, and some pain was felt in the lower leg, but there was no return of the sciatica. The patient was able to resume work. The sciatica was probably rheumatic. The list of cases of nerve stretching yet performed is not large enough to settle the question of the justifiableness of the operation. Mr. Pye then reviewed very carefully the history of the operation. It has been less successful in the treatment of tetanus than neuralgia. When the nerve was compressed by an inflammatory area the operation promised well. In cases where the skin had become altered a change toward the normal condition followed, as well as the relief of pain.

Tuberculosis from Diseased Milk.

Professor Otto Bollinger, of Munich, says, in a paper recently read in that city, that repeated experiments show that the milk of tuberculous beasts has a very decided contagious influence, and reproduces the disease in various animals, and that its noxious properties cannot be expelled even by boiling. While the tuberculosis of man is not completely identical with that of

the cow, it is exactly similar; hence, there is constant danger to any community where milk is freely used. The professor enjoins upon farmers the necessity of taking the strictest care of their stock, and upon people generally the greatest care as to the quality of milk they use.

It is well known that phthisis is a common disease in cows. In some herds ten per cent. die of it. A brief but striking description of it is given by Dr. Teller, *Diseases of Live Stock*, page 287-8.

Nutritious Ferns.

The *Journal of the Franklin Institute*, February, 1880, informs us that the dwellers on the argillaceous mountains of Japan derive most of their food from a variety of ferns, which they call *warabi*. In spring they eat the young leaves; later in the season they feed on the starch which they extract from the roots. In extracting the starch, the roots are carefully washed, in order to remove all dirt, then crushed by mallets, and the pulp stirred in reservoirs of water. The water is then drawn into other reservoirs to settle, depositing about fifteen pounds of starch for every one hundred pounds of roots. In order to secure the reproduction of the ferns, the natives often burn the herbage and brushwood that spring up under the shade of the oaks and chestnuts. Vast tracts have been devastated by this deplorable practice.

Trichinosis.

The *Veterinarian* for February draws attention to the extremely small amount of knowledge we have of the extent of prevalence of trichinae in home-fed pork, to the certainty of this form of parasite infesting largely American pork, and to the difficulty of discriminating trichinosis in man from enteric fever and acute rheumatism. From these considerations it argues that trichinosis is probably of more common occurrence among human beings than has hitherto been conceived, and suggests the necessity of some steps being taken by the Government or the Legislature to insure some greater degree of safety in this matter than now exists.

The Spirilla-Spirochaetes.

It has been pretty conclusively proved by Obermeier that relapsing fever is due to the entrance into the blood of this minute air-born vegetable organism. In further proof of this, we are informed by the *London Medical Record*, January 15th, 1880, that Vandyke Carter, in

India, has injected under the skin of monkeys defibrinated blood proceeding from patients suffering from relapsing fever, and which contained spirillæ. On the sixth day the monkeys were attacked with violent fever, and the blood was filled with spirillæ. Cohn, of Breslau, has further cultivated this spirilla in successful culture-fluids outside of the body, and reproduced feverish attacks with the third or fourth culture-fluid.

CORRESPONDENCE.

Observations on the Heatonian Method for the Cure of Hernia.

ED. MED. AND SURG. REPORTER:—

Some criticisms have recently appeared in contemporary journals on the late Dr. Heaton's method of operating for the radical cure of hernia. One of these critics quotes Dr. Heaton's cardinal point, "that any inflammation, except the mildest grade, must be carefully avoided." This is not the first time that this statement has been misunderstood. I know, from an intimate personal acquaintance with Dr. Heaton, that he is here warning us against irritating the peritoneum, and that he is far from maintaining that no inflammation or even a very slight inflammation is essential to a radical cure. Because of this friendship with Dr. Heaton for many years before his death, because this operation was explained to me before he ever published it, and because he himself showed me how to operate, I feel that what I say about the operation should have considerable weight in any discussion upon the subject.

The critic next proceeds to give a synopsis of Dr. Heaton's operation, together with his formula, as if it were something new and unknown. Thus far we have been treated, not to anything original, but only to quotations. He now describes a new instrument of his contrivance, a syringe holding twenty minims, and consisting of a barrel with a trocar needle, which holds a canula. After the needle has penetrated the tissues the sheath is withdrawn, and allows the canula to project beyond. After making this manœuvre and gradually depositing a few drops of the crude mixture on the parts, the operation is complete, so far as injection is concerned. When we consider that this instrument is a syringe with "points added, like Fitch's trocar," we fail to see any originality in the instrument.

I hardly need call the attention of any surgeon of prominence who keeps well up in the anatomy of these parts to the great danger of wounding the epigastric and pubic arteries and other blood vessels and nerves by a sharp lancet or angular-pointed instrument. The cautious surgeon well knows that his patient might easily receive a dangerous wound here, and bleed to death, perhaps, before it be discovered and secured. Hence, after what is known and has been said on this subject, a hypodermic syringe, or any thin and sharp-pointed instrument, will appear extremely dangerous to most successful surgeons.

I should suppose there was hardly a single maker of surgical instruments who would be a party to the manufacture of any such dangerous instruments, and much less that there was any surgeon who would attempt to use such foul implements on any human being.

Indeed, one of the many reasons why Dr. Heaton preferred a needle like a bradawl, with a round and somewhat blunted point, was that it would easily and safely glide off the coats of the vessels. In my instrument I further guarded against danger by a round and blunt-pointed needle, which would revolve in penetrating the tissues. In this way there is still less danger of wounds or unnecessary irritation than in Dr. Heaton's method of sweeping the needle around, so as to distribute the fluid equally upon all the parts. With my instrument the fluid is simply and completely distributed around the rings and canal during the act of entering and withdrawing the instrument, and there is no possible danger of injury to the parts during the operation.

It is generally accepted that to improve an instrument is to perfect it, render it less dangerous and more effective in any given operation. The critic referred to, in seeking to improve upon Dr. Heaton's instrument, instead of perfecting it has made a far more complicated affair, and produced an instrument not unlike, in its effects, the one devised by Dr. Davenport, which I have already condemned as extremely dangerous, in the article above mentioned.

The writer mentioned, in seeking to deposit a few drops upon the parts through the beak of his syringe, has misunderstood the operation as performed by Dr. Heaton. Even if it is not generally known, yet it is a fact, as I know, from having assisted Dr. Heaton, that he strove to force the fluid through the point of his syringe, with considerable force and violence, so that the fluid would become changed into a spray as it fell upon the surrounding parts of the hernial rings. Otherwise he could not expect success from the operation.

This has been invariably my experience in performing the operation many times. In regard to the duration of the after treatment, my experience has been, and it was the experience of Dr. Heaton, that the effusion of plasto-lymph around the parts is not sufficiently organized in five or ten days after the operation into adherent and fibrous tissue, to bear any strain at all upon them. They would at once separate and give way. Dr. Heaton caused his cases to remain at rest at least ten or twelve days. That we know from his experience, and I can say the same has been the case in mine.

As to the wearing of a truss for five or six months after the operation, this course I pursue with the majority of my patients. I shall also refer to this in a report written some time since, and soon to be published—a report for which the profession have expressed an anxious curiosity. I shall there present some valuable points never before given by any one, and which I have learned while working over the whole field of these operations for hernia.

I do not wish to be considered an opposer of any other gentleman; on the contrary, nothing pleases me so much as to have others do this

operation successfully. When, however, they attempt to do it, I do hope that they will select a proper and safe instrument to work with. If any one can devise a better instrument than has been devised, I, for one, should be happy to have him do it, and shall be happy to use it. But I hope they will be sure that it is safe, and that it gives honor to the good name of the operation, before they make it public as an improvement upon both Dr. Heaton's instrument and my own, which are already in successful use. Therefore, as the only living man whom Dr. Heaton ever personally taught the operation as it was performed by him, I protest, in the name of humanity, against the use of any sharp- or angular-pointed needle in the operation, and I emphatically warn the profession to expect many unfavorable and even dangerous results from the use of such instruments; results which probably might have been a successful cure had proper instruments been used.

Lest the profession should consider me over cautious in this matter I will refer to an incident during a recent visit I made to New York. Dr. Post desired me to go the Presbyterian Hospital to see a patient he had operated upon for hernia, but in whom he had not ventured to make the injection from the surface, for fear of injuring the arteries and other vessels. He had therefore first cut down upon the rings with the scalpel, freely, and then injected. He was in dread of these sharp-pointed instruments, but thought my new-pointed instrument avoided the difficulty. If this skillful and veteran surgeon, famous for his successful operations, dreaded and did not dare use a sharp-pointed instrument, how much more should the mere tyro in surgery avoid their use? It is impossible to be too cautious in this region so rich in surgical anatomy.

For those who may not have seen any of my former articles I will repeat the formulas which I use in my operations.

For infants and children to the age of five, for accidental or congenital hernia, aqueous extract of oak, of Dr. Heaton's formula.

For children five to fifteen, extract of oak distilled to the consistency of glycerine, with ten drops to the drachm of sulphuric ether.

For old and long-standing hernia, congenital or otherwise, I find the latter extract of oak, with one drachm of absolute alcohol to four of the extract, and one drachm of sulphuric ether with one or two grains of sulphate of morphia added, give me the best results.

Boston, Mass. JOSEPH H. WARREN, M.D.

Imperforate Anus.

ED. MED. AND SURG. REPORTER:—

Mrs. A. was confined January 8th, 1880. The child was a male; weighed 10 pounds. Both seemed well at my visit, two days after. The child's bowels had not moved; a dose of oil was ordered. That night a message came for me, saying there was "no place for a passage." An examination revealed an imperforate anus. I began an operation at once. This was necessarily tedious. Several times I detected a marked odor of fecal flatus. I supposed the

bowel was reached, and injected water to facilitate a passage, but to no avail. The grandmother incidentally remarked that the diaper was slightly soiled with something resembling meconium. My incisions extended to the depth of an inch and a half.

The child was now allowed to rest while I went home to read up. I began to suspect a communication between the rectum and bladder.

The following morning Dr. B. F. Gardner, of Bloomsburg, was called in consultation. He dissected the part thoroughly, to the depth of three inches or more, but to no purpose. He decided that "more cutting would be bad surgery." Hoping that some favorable indications might occur, we again met the next morning, but nothing more could be done. The Dr. requested a post-mortem examination, and agreed to be present. The next morning the child died, five days after birth.

The following morning I performed a post-mortem examination; circumstances uncontrollable prevented Dr. Gardner's presence.

The rectum curved parallel to the bladder, which it joined at its neck. Both discharged by the urethra. The bowel diminished in calibre as it descended. Dr. Gardner's incision extended to within one-eighth of an inch of the rectum. I removed the bowel and bladder and forwarded them to Dr. Gardner, who made a plaster cast of the malformation. I neglected to say that Dr. Gardner diagnosed a connection between the two viscera.

J. J. BROWN, M.D.

Millville, Col. Co., Pa., Jan. 13th, 1880.

The Mishaps Attending the Treatment of a Burn.

ED. MED. AND SURG. REPORTER:—

Having seen in the REPORTER, April, 19, 1879, "The Treatment of a Terrible Burn," by Dr. C. H. Merrick, and having recently assisted in treating a similar case, I hope its reading may be acceptable to your numerous readers.

Mr. C. R., living three miles in the country, was accidentally burned by kerosene oil, about the first of this month. The oil was spilled from a lamp on the right sleeve of his shirt, and on the bosom, the blaze catching from the burning lamp and horribly burning that arm from the wrist to the neck and all over the right side of the chest, and in using his left hand to extinguish the fire and tear off his shirt, it was burned all over, all the skin peeling off.

Carbolized neat's-foot oil, carbolized linseed oil, bismuth, starch, eggs, charcoal, and tannin were the main remedies used externally; some glycerine and solution of chloral were also employed; but it is needless to state all the particulars.

He is about thirty-five years old, having a fair constitution and tolerably good habits for a laboring man. Owing to his situation and circumstances, there was some difficulty in having him nursed, and at times he was delirious and hard to control. The medicines were not given as prescribed, and on one occasion a preparation of brom. pot. and chloral sent out from the drug store was lost, and in consequence of it he suffered all night unnecessarily. The burns were not

properly dressed at other times, when left to the nurse. On one occasion the chloral mixture was exhausted about midnight, and the nurse gave him pills of gum opium, and the effect nearly caused his death.

Let me repeat the warning about the impropriety and bad effects of giving opium or morphine after chloral, or *vice versa*, giving chloral after opiates. If they are mixed and given together no bad effects follow. In this case and some others which are known to me, though not my patients, the action of the heart is suspended and respiration ceases, which require the prompt use of stimulants, frictions, sinapisms, stimulating embrocations and other means necessary to restore these suspended functions. This man was so far gone that the gentleman with whom he lives was certain he was dead, and was making preparations for his burial; but by energetic measures life was restored, and he is now about well.

On one occasion the nurse applied bismuth over the sores, and he used all he had; but on looking about he found what he thought was a paper full of bismuth, which he proceeded to sprinkle on, but the patient complained of its smarting and burning; and it proved to be lime, which, fortunately, was air-slacked, or it would have been about as bad as the original burn.

I saw him only twice, in consultation. The integument all came off his left hand, his right arm, and nearly all the right side of the chest. There will be very little impairment of the hand, but probably some contraction of the muscles of the right arm; the biceps muscle is now contracted a little.

A. R. KILPATRICK, M.D.

Navasota, Texas, April 25th, 1879.

NEWS AND MISCELLANY.

Hydrobromic Ether.

There is every probability that this anæsthetic will come into vogue quite extensively if it continues to make good the reputation it has already achieved. The best sample we have seen is that prepared by Messrs. Wyeth & Bro. The aliaqueous odor, which is disagreeably marked on almost all specimens, is hardly or at all perceptible on their preparation. We have compared it with other samples with much satisfaction. The price is also in process of reduction. It sells at \$4.00 per pound, and as two to four drachms are ordinarily enough fully to anæsthetize an adult, it is, even at this price, as cheap in practice as the best sulphuric ether.

Fraudulent Medical Colleges.

Before a committee of the Massachusetts Legislature, last month, the names of nine legally chartered medical colleges were read, whose diplomas were not recognized by the Massachusetts Medical Society, because of proof positive that these colleges sell their diplomas without any evidence of study or fitness for medical practice, one of them (the Philadelphia University of Medicine and Surgery) maintaining an agency in Europe, for the express purpose of selling diplomas. Three of these nine institutions are

in Cincinnati. The list is as follows: American University of Medicine and Surgery, of Philadelphia; Philadelphia University of Medicine and Surgery; Physio-Eclectic Medical College, of Cincinnati, O.; Physio-Medical College (new issue), of Cincinnati; American Eclectic Medical College, of Cincinnati; St. Louis Homœopathic Medical College; St. Louis Eclectic Medical College; New England University of Medicine and Surgery, of Manchester, N.H.; University of Medicine and Surgery, of Haddonfield, N. J.; and American Vitopathic College, of Cincinnati, Ohio.

Modern Fashions.

A writer in the London *Lancet* is hard on the bangs, veils and tie-backs now so cherished by the fair sex. He writes—

At the present time women go about hobbled, after the fashion adopted by our forefathers to prevent the straying of their horses and asses when turned out to grass. Bonds encircle the legs and knees, and besides preventing a decent gait, expose the wearers of such ridiculous gear to the risk of falling, particularly when hurrying across a crowded thoroughfare, or even stepping upon a curbstone. This is sufficiently monstrous; but even worse, because persistent, mischief is done by the practice of binding a veil tightly round the face in such a way that not only is the sight obscured, but the eyes are mechanically irritated by the fabric clouding them. Cases of something worse than mental annoyance and "nervousness," distinctly traceable to this cause, are falling under the observation of practitioners, and when the practice is denounced, "fashion" is pleaded as its excuse.

The Best Vehicle.

An anecdote is told of a physician who was called to a foreign family to prescribe for a case of incipient consumption. He gave them a prescription for pills, and wrote the direction: "One pill to be taken three times a day, in any convenient vehicle." The family looked in the dictionary to get at the meaning of the prescription. They got on well until they got to the word vehicle. They found "cart, wagon, carriage, buggy, wheelbarrow." After grave consideration they came to the conclusion that the doctor meant the patient should ride out, and while in the vehicle he should take the pill. He followed the advice to the letter, and in a few weeks the fresh air and exercise secured the advantage which otherwise might not have come.

Statistics of Ovariectomy.

In skilled hands the statistics of ovariectomy are constantly improving. Undoubtedly, the introduction of antiseptic precautions, according to the Lister method, is to be credited with this improvement to a large extent. As an instance of uncommon success we may mention that Dr. William Goodell, Clinical Professor of the Diseases of Women in the University of Pennsylvania, has performed, during the past year, eight operations for ovariectomy, with only one death. All were performed under the antiseptic spray.

The Metric System.

At the International Medical Congress held last autumn, at Amsterdam, a resolution was adopted declaring that it was now opportune to make, on the basis of the metric system, an international pharmacopœia for the common use of the nations willing to accept it, and inviting the Pharmaceutical Society of Paris to communicate its project of an international pharmacopœia, in order that it might be printed among the documents of the Congress, unless previously issued by the Pharmaceutical Society itself. The following gentlemen were nominated by the Congress as a commission, and charged to present a report on this subject at the next session of the Congress, which is to be held in England in 1881: MM. Lewis A. Sayre, of New York; Dechambre, of Paris; Ernest Hart, of London; Warlomont, of Brussels; Guye, of Amsterdam; Palasciano, of Naples; E. Seguin, of New York; Gille, of Brussels; and Méhu, of Paris.

Cooling Water Coils.

We have been shown a sample of Larrabee's "cooling pads and water coils," manufactured by Werner Brothers, Louisville, Ky. The device is a tube of india rubber, of a quarter inch calibre, which is formed into a coil or pad of any desired size, and which can always be kept cool by a flow of water of the proper temperature through the tube. This is not a novel device, as in several forms it has already been before the profession, notably in the fever bed of the late Dr. Kibbee, but the convenience of the pads before us and their neat preparation will commend them to all.

Commencement of the American Veterinary College.

On Friday evening, February 27th, 1880, the Commencement exercises of the American Veterinary College were held in Chickering Hall, New York City. Prof. D. B. St. John Roosa delivered the address to the graduating class, consisting of eighteen members, complimenting them on having chosen a profession offering so rich a field for labor, investigation and advancement. Prizes were awarded for the best examinations. The College was congratulated on its success, which may now be regarded as assured.

Quarantine Conference.

The National Board of Health requests that all quarantine authorities of the United States will send authorized representatives to meet with it, in Washington, on the 5th of May next, for the purpose of amending the rules and regulations prepared by the Board last year, and recommended by it to State and local quarantine authorities for adoption.

OBITUARY NOTICES.

—Surgeon General William Maxwell Wood, United States Navy, died, March 1st, at his residence, Owings Mills, Baltimore county, Maryland, in the 72d year of his age. He was a native of Baltimore, and was appointed in May, 1829, as

assistant surgeon at the Pensacola Navy Yard. Subsequently he served in the West India Squadron, and was commissioned as surgeon in 1838. He was fleet surgeon of the Pacific Squadron in 1844-46, and rendered valuable service at the breaking out of the Mexican war. During the civil war he was fleet surgeon on the North Atlantic blockading squadron, and participated, on board the flagship *Minnesota*, in the first battle of ironclads, that of the *Monitor* with the *Merri-mac* and other vessels of the Confederate squadron, in Hampton Roads, also in the capture of Sewell's Point. In 1868 he was appointed president of the Examining Board, was Chief of the Bureau of Medicine and Surgery in 1870 and was retired in 1871.

—Assistant Surgeon Robert White, of the United States Marine Hospital Service, died February 24th, at his station on Bedloe's Island, in New York Harbor, of phthisis pulmonalis, at the age of 32 years. Dr. White took his degree in medicine in Harvard University. He was designated by the Surgeon General to investigate the yellow fever epidemic of 1878, which duty he courageously performed. He also accompanied the party in the revenue cutter *Rush*, on her cruise to Alaska, of which trip he prepared a scientific report of much value, and made some valuable contributions to the Smithsonian Institution.

—Dr. H. H. Toland, of San Francisco, one of the most prominent physicians in California, died from apoplexy yesterday.—*New York Times*, Feb. 28th, 1880.

QUERIES AND REPLIES.

—*Veterinarian*.—Prof. William Williams, John Gamgee and George Fleming may be considered leading authors on the subject.

—*Dr. J. E. H., of Mo.*—The electric cautery may be used to remove hairs. There are also many depilatories of more or less value, formulas of which you will find in the usual repertoires.

—*Dr. S. W. B., of Tenn.*—Dr. Fothergill has written considerably on hydrobromic acid, but no monograph on the subject has appeared.

—*Chirurg.*—Any instrument you wish can be made here. Send drawings, etc., and we will get estimates.

MARRIAGES.

GREEN-SMITH.—At Brooklyn, N. Y., on Wednesday, February 22d, by the Rev. Dr. Bakewell, Dr. William Green, of Trenton, N. J., and Mrs. Louise B. Smith, of Patterson, N. Y.

THOMPSON-THOMPSON.—At Martha Furnace, Pa., February 18th, by Rev. Robert Hamill, D.D., James A. Thompson, M.D., of Snow Shoe, Pa., and Miss Nora M., daughter of John I. Thompson, Esq., of Martha Furnace.

DEATHS.

GOLDSMITH.—At his residence, at Ashland, Camden County, N. J., Dr. Thomas Oliver Goldsmith, formerly of Philadelphia, aged 73 years.

HAWES.—At Montclair, N. J., 25th ultimo, George Elias Hawes, M.D., aged 41 years.

LEAVITT.—Suddenly, on Monday, February 23d, at Atlantic City, T. L. Leavitt, M.D., son of the late H. A. Leavitt.